

Richard N Zare

List of Publications by Year in descending order

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407
papers

23,119
citations

6592

79
h-index

14156

128
g-index

444
all docs

444
docs citations

444
times ranked

16433
citing authors

#	ARTICLE	IF	CITATIONS
1	Advances in Asphaltene Science and the Yenâ€“Mullins Model. Energy & Fuels, 2012, 26, 3986-4003.	2.5	789
2	One-Pot Synthesis of Protein-Embedded Metalâ€“Organic Frameworks with Enhanced Biological Activities. Nano Letters, 2014, 14, 5761-5765.	4.5	754
3	Drug Release from Electric-Field-Responsive Nanoparticles. ACS Nano, 2012, 6, 227-233.	7.3	434
4	Cavity ringâ€“down spectroscopy for quantitative absorption measurements. Journal of Chemical Physics, 1995, 102, 2708-2717.	1.2	429
5	OPTICAL DETECTION OF SINGLE MOLECULES. Annual Review of Biophysics and Biomolecular Structure, 1997, 26, 567-596.	18.3	409
6	UV Irradiation of Polycyclic Aromatic Hydrocarbons in Ices: Production of Alcohols, Quinones, and Ethers. Science, 1999, 283, 1135-1138.	6.0	352
7	Optimizing Chemical Reactions with Deep Reinforcement Learning. ACS Central Science, 2017, 3, 1337-1344.	5.3	291
8	Microfluidic Platforms for Single-Cell Analysis. Annual Review of Biomedical Engineering, 2010, 12, 187-201.	5.7	287
9	Spontaneous generation of hydrogen peroxide from aqueous microdroplets. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 19294-19298.	3.3	287
10	Optimization of Molecules via Deep Reinforcement Learning. Scientific Reports, 2019, 9, 10752.	1.6	243
11	Chemical Transformations in Individual Ultrasmall Biomimetic Containers. Science, 1999, 283, 1892-1895.	6.0	236
12	Packaging and delivering enzymes by amorphous metal-organic frameworks. Nature Communications, 2019, 10, 5165.	5.8	234
13	Reaction of Cl with vibrationally excited CH ₄ and CHD ₃ : Stateâ€“state differential cross sections and steric effects for the HCl product. Journal of Chemical Physics, 1995, 103, 7313-7335.	1.2	228
14	Evidence for Island Structures as the Dominant Architecture of Asphaltenes. Energy & Fuels, 2011, 25, 1597-1604.	2.5	220
15	Bondâ€“specific chemistry: OD:OH product ratios for the reactions H+HOD(100) and H+HOD(001). Journal of Chemical Physics, 1991, 95, 8647-8648.	1.2	217
16	MYC oncogene overexpression drives renal cell carcinoma in a mouse model through glutamine metabolism. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 6539-6544.	3.3	211
17	Micrometer-Sized Water Droplets Induce Spontaneous Reduction. Journal of the American Chemical Society, 2019, 141, 10585-10589.	6.6	205
18	Acceleration of reaction in charged microdroplets. Quarterly Reviews of Biophysics, 2015, 48, 437-444.	2.4	204

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19	Microdroplet fusion mass spectrometry for fast reaction kinetics. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 3898-3903.	3.3	197
20	Interdisciplinary Research: From Belief to Reality. Science, 1999, 283, 642-643.	6.0	193
21	Observation and interpretation of a time-delayed mechanism in the hydrogen exchange reaction. Nature, 2002, 416, 67-70.	13.7	187
22	Molecular assessment of surgical-resection margins of gastric cancer by mass-spectrometric imaging. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 2436-2441.	3.3	185
23	Selection rules for the photoionization of diatomic molecules. Journal of Chemical Physics, 1990, 93, 3033-3038.	1.2	180
24	Strong Electric Field Observed at the Interface of Aqueous Microdroplets. Journal of Physical Chemistry Letters, 2020, 11, 7423-7428.	2.1	177
25	Preparation and Characterization of Monolithic Porous Capillary Columns Loaded with Chromatographic Particles. Analytical Chemistry, 1998, 70, 5103-5107.	3.2	175
26	Diagnosis of prostate cancer by desorption electrospray ionization mass spectrometric imaging of small metabolites and lipids. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 3334-3339.	3.3	174
27	Radiative lifetimes of the alkaline earth monohalides. Journal of Chemical Physics, 1974, 60, 2330-2339.	1.2	171
28	Effect of atomic reagent approach geometry on reactivity: Reactions of aligned Ca(1P1) with HCl, Cl ₂ , and CCl ₄ . Journal of Chemical Physics, 1982, 77, 2416-2429.	1.2	168
29	Abiotic production of sugar phosphates and uridine ribonucleoside in aqueous microdroplets. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 12396-12400.	3.3	166
30	Potassium <i>tert</i> -Butoxide-Catalyzed Dehydrogenative C-H Silylation of Heteroaromatics: A Combined Experimental and Computational Mechanistic Study. Journal of the American Chemical Society, 2017, 139, 6867-6879.	6.6	160
31	Syntheses of Isoquinoline and Substituted Quinolines in Charged Microdroplets. Angewandte Chemie - International Edition, 2015, 54, 14795-14799.	7.2	158
32	Effect of reagent orientation and rotation upon product state distribution in the reaction Sr+HF (v=1, J) → SrF(v=2, J=2) +H. Journal of Chemical Physics, 1978, 69, 5199-5201.	1.2	149
33	Picturing the Transition-State Region and Understanding Vibrational Enhancement for the Cl + CH ₄ → HCl + CH ₃ Reaction. The Journal of Physical Chemistry, 1996, 100, 7938-7947.	2.9	143
34	Determination of population and alignment of the ground state using two-photon nonresonant excitation. Journal of Chemical Physics, 1986, 85, 6874-6897.	1.2	139
35	Photofragment angular momentum distributions in the molecular frame: Determination and interpretation. Journal of Chemical Physics, 1999, 110, 3341-3350.	1.2	139
36	State-to-state reaction rates: Ba+HF(v=0,1) → BaF(v=0-12)+H. Journal of Chemical Physics, 1976, 64, 1774-1783.	1.2	138

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37	Can all bulk-phase reactions be accelerated in microdroplets?. <i>Analyst, The</i> , 2017, 142, 1399-1402.	1.7	133
38	Photopolymerized Solâˆ“Gel Monoliths for Capillary Electrochromatography. <i>Analytical Chemistry</i> , 2001, 73, 3921-3926.	3.2	127
39	Direct inelastic scattering of N2 from Ag(111). I. Rotational populations and alignment. <i>Journal of Chemical Physics</i> , 1988, 89, 2558-2571.	1.2	126
40	Asphaltene Molecular-Mass Distribution Determined by Two-Step Laser Mass Spectrometry. <i>Energy & Fuels</i> , 2009, 23, 1162-1168.	2.5	125
41	Spontaneous formation of gold nanostructures in aqueous microdroplets. <i>Nature Communications</i> , 2018, 9, 1562.	5.8	124
42	Quantum control of molecular collisions at 1 kelvin. <i>Science</i> , 2017, 358, 356-359.	6.0	121
43	The MYC Oncogene Cooperates with Sterol-Regulated Element-Binding Protein to Regulate Lipogenesis Essential for Neoplastic Growth. <i>Cell Metabolism</i> , 2019, 30, 556-572.e5.	7.2	120
44	Highâ€resolution angleâ€and energyâ€resolved photoelectron spectroscopy of NO: Partial wave decomposition of the ionization continuum. <i>Journal of Chemical Physics</i> , 1989, 91, 2216-2234.	1.2	119
45	Alteration of the lipid profile in lymphomas induced by MYC overexpression. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, 10450-10455.	3.3	118
46	Detecting Reaction Intermediates in Liquids on the Millisecond Time Scale Using Desorption Electrospray Ionization. <i>Angewandte Chemie - International Edition</i> , 2011, 50, 250-254.	7.2	116
47	Highly active enzymeâ€metal nanohybrids synthesized in proteinâ€polymer conjugates. <i>Nature Catalysis</i> , 2019, 2, 718-725.	16.1	115
48	Core extraction for measuring stateâ€toâ€state differential cross sections of bimolecular reactions. <i>Journal of Chemical Physics</i> , 1995, 103, 7299-7312.	1.2	114
49	Ionic and Neutral Mechanisms for Câ€H Bond Silylation of Aromatic Heterocycles Catalyzed by Potassium <i>tert</i> -Butoxide. <i>Journal of the American Chemical Society</i> , 2017, 139, 6880-6887.	6.6	111
50	Oncogene KRAS activates fatty acid synthase, resulting in specific ERK and lipid signatures associated with lung adenocarcinoma. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, 4300-4305.	3.3	110
51	Going beyond electrospray: mass spectrometric studies of chemical reactions in and on liquids. <i>Chemical Science</i> , 2016, 7, 39-55.	3.7	109
52	State-to-state differential cross sections from photoinitiated bulb reactions. <i>Chemical Physics Letters</i> , 1993, 212, 155-162.	1.2	108
53	Biased Diffusion, Optical Trapping, and Manipulation of Single Molecules in Solution. <i>Journal of the American Chemical Society</i> , 1996, 118, 6512-6513.	6.6	107
54	Photofragment Helicity Caused by Matter-Wave Interference from Multiple Dissociative States. , 1998, 281, 1346-1349.		104

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55	Condensing water vapor to droplets generates hydrogen peroxide. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 30934-30941.	3.3	104
56	Identification of Fleeting Electrochemical Reaction Intermediates Using Desorption Electrospray Ionization Mass Spectrometry. Journal of the American Chemical Society, 2015, 137, 7274-7277.	6.6	103
57	Laser-Based Mass Spectrometric Assessment of Asphaltene Molecular Weight, Molecular Architecture, and Nanoaggregate Number. Energy & Fuels, 2015, 29, 2833-2842.	2.5	102
58	Imaging of Proteins in Tissue Samples Using Nanospray Desorption Electrospray Ionization Mass Spectrometry. Analytical Chemistry, 2015, 87, 11171-11175.	3.2	101
59	Effect of vibrational excitation on the molecular beam reactions of Ca and Sr with HF and DF. Journal of Chemical Physics, 1978, 68, 3360-3365.	1.2	98
60	Abiotic synthesis of purine and pyrimidine ribonucleosides in aqueous microdroplets. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 36-40.	3.3	98
61	Simple model for the electric field and spatial distribution of ions in a microdroplet. Journal of Chemical Physics, 2020, 152, 184702.	1.2	98
62	Oral squamous cell carcinoma diagnosed from saliva metabolic profiling. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 16167-16173.	3.3	98
63	A search for mode-selective chemistry: The unimolecular dissociation of <i>t</i> -butyl hydroperoxide induced by vibrational overtone excitation. Journal of Chemical Physics, 1982, 77, 4447-4458.	1.2	97
64	Catalytic Carbonylative Spirolactonization of Hydroxycyclopropanols. Journal of the American Chemical Society, 2016, 138, 10693-10699.	6.6	97
65	Resonance-enhanced multiphoton ionization of molecular hydrogen via the E,F1 \hat{g} + state: Photoelectron energy and angular distributions. Chemical Physics Letters, 1984, 105, 22-27.	1.2	96
66	Comparison of experimental and theoretical integral cross sections for D+H ₂ (<i>v</i> =1, <i>j</i> =1) \hat{a} \hat{t} HD(<i>v</i> \hat{e} TM =1, <i>j</i> \hat{a} TM)+H. Journal of Chemical Physics, 1991, 95, 1648-1662.	1.2	96
67	Capturing fleeting intermediates in a catalytic C-H amination reaction cycle. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 18295-18299.	3.3	93
68	Advances in Capillary Electrochromatography: A Rapid and High-Efficiency Separations of PAHs. Analytical Chemistry, 1998, 70, 4787-4792.	3.2	91
69	Chemoselective Pd-Catalyzed Oxidation of Polyols: Synthetic Scope and Mechanistic Studies. Journal of the American Chemical Society, 2013, 135, 7593-7602.	6.6	91
70	Internal-state distribution of recombinative hydrogen desorption from Si(100). Journal of Chemical Physics, 1992, 96, 3995-4006.	1.2	87
71	Effect of atomic reagent approach geometry on electronic state branching: The Ca(1P1) + HCl reaction. Journal of Chemical Physics, 1981, 75, 3636-3637.	1.2	85
72	Dynamics for the Cl+C ₂ H ₆ \hat{a} \hat{t} HCl+C ₂ H ₅ reaction examined through state-specific angular distributions. Journal of Chemical Physics, 1996, 105, 7550-7559.	1.2	84

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73	On-Line Preconcentration in Capillary Electrochromatography Using a Porous Monolith Together with Solvent Gradient and Sample Stacking. <i>Analytical Chemistry</i> , 2001, 73, 5557-5563.	3.2	83
74	Vibrational Control in the Reaction of Methane with Atomic Chlorine. <i>Journal of the American Chemical Society</i> , 2001, 123, 12714-12715.	6.6	83
75	Detection of the Short-Lived Radical Cation Intermediate in the Electrooxidation of <i>N,N</i> -Dimethylaniline by Mass Spectrometry. <i>Angewandte Chemie - International Edition</i> , 2015, 54, 11183-11185.	7.2	83
76	Lifetime-resolved spectroscopy: Observation and rotational analysis of the BaO $\tilde{1}^1$ state. <i>Journal of Chemical Physics</i> , 1975, 62, 2050-2059.	1.2	82
77	Hadamard Transform Time-of-Flight Mass Spectrometry. <i>Analytical Chemistry</i> , 1998, 70, 3735-3741.	3.2	82
78	Is the simplest chemical reaction really so simple?. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, 15-20.	3.3	82
79	LprG-Mediated Surface Expression of Lipoarabinomannan Is Essential for Virulence of <i>Mycobacterium tuberculosis</i> . <i>PLoS Pathogens</i> , 2014, 10, e1004376.	2.1	82
80	Two-Phase Reactions in Microdroplets without the Use of Phase-Transfer Catalysts. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 3562-3565.	7.2	82
81	Recombinative desorption of H ₂ on Si(100)-(2 \times 1) and Si(111)-(7 \times 7): Comparison of internal state distributions. <i>Journal of Chemical Physics</i> , 1992, 97, 1520-1530.	1.2	81
82	Laser-Based Mass Spectrometric Determination of Aggregation Numbers for Petroleum- and Coal-Derived Asphaltenes. <i>Energy & Fuels</i> , 2014, 28, 475-482.	2.5	81
83	Aqueous microdroplets containing only ketones or aldehydes undergo Dakin and Baeyer-Villiger reactions. <i>Chemical Science</i> , 2019, 10, 10974-10978.	3.7	81
84	Measurement of product alignment in beam-gas chemiluminescent reactions. <i>Journal of Chemical Physics</i> , 1981, 75, 2222-2230.	1.2	80
85	Determination of orientation of the ground state using two-photon nonresonant excitation. <i>Journal of Chemical Physics</i> , 1988, 88, 6707-6732.	1.2	79
86	Enantiomeric separation of amino acids and nonprotein amino acids using a particle-loaded monolithic column. <i>Electrophoresis</i> , 2000, 21, 3145-3151.	1.3	79
87	Pancreatic Cancer Surgical Resection Margins: Molecular Assessment by Mass Spectrometry Imaging. <i>PLoS Medicine</i> , 2016, 13, e1002108.	3.9	79
88	Chemiluminescence detection in capillary electrophoresis. <i>Journal of High Resolution Chromatography</i> , 1992, 15, 133-135.	2.0	78
89	Reaction dynamics of atomic chlorine with methane: Importance of methane bending and torsional excitation in controlling reactivity. <i>Journal of Chemical Physics</i> , 1998, 109, 9719-9727.	1.2	78
90	Complete description of two-photon (1+1 TM) ionization of NO deduced from rotationally resolved photoelectron angular distributions. <i>Journal of Chemical Physics</i> , 1991, 95, 1757-1767.	1.2	77

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91	Adsorption of Crystal Violet to the Silica-Water Interface Monitored by Evanescent Wave Cavity Ring-Down Spectroscopy. <i>Journal of Physical Chemistry B</i> , 2003, 107, 7070-7075.	1.2	76
92	Measurements of Cl-atom photofragment angular momentum distributions in the photodissociation of Cl ₂ and ICl. <i>Journal of Chemical Physics</i> , 1999, 110, 3351-3359.	1.2	75
93	Personal Information from Latent Fingerprints Using Desorption Electrospray Ionization Mass Spectrometry and Machine Learning. <i>Analytical Chemistry</i> , 2017, 89, 1369-1372.	3.2	75
94	Cold quantum-controlled rotationally inelastic scattering of HD with H ₂ and D ₂ reveals collisional partner reorientation. <i>Nature Chemistry</i> , 2018, 10, 561-567.	6.6	74
95	Ultrafast enzymatic digestion of proteins by microdroplet mass spectrometry. <i>Nature Communications</i> , 2020, 11, 1049.	5.8	74
96	Depolarization of optically prepared molecules by two randomly oriented spins. <i>Molecular Physics</i> , 1985, 55, 1-9.	0.8	73
97	Fluorescence Polarization Anisotropy in Microdroplets. <i>Journal of Physical Chemistry Letters</i> , 2018, 9, 2928-2932.	2.1	72
98	Effect of reagent rotation on product energy disposal in the light atom transfer reaction O(3P)+HCl(v=2,J=1,6,9)→OH(v=™,N=™)+Cl(2P). <i>Journal of Chemical Physics</i> , 1991, 94, 2704-2712.	1.2	71
99	Distinguishing malignant from benign microscopic skin lesions using desorption electrospray ionization mass spectrometry imaging. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, 6347-6352.	3.3	71
100	High-Resolution Live-Cell Imaging and Analysis by Laser Desorption/Ionization Droplet Delivery Mass Spectrometry. <i>Analytical Chemistry</i> , 2016, 88, 5453-5461.	3.2	70
101	Rapid Hydrogen-Deuterium Exchange in Liquid Droplets. <i>Journal of the American Chemical Society</i> , 2017, 139, 6851-6854.	6.6	70
102	Nanomaterial Preparation by Extrusion through Nanoporous Membranes. <i>Small</i> , 2018, 14, e1703493.	5.2	69
103	Sprayed Water Microdroplets Are Able to Generate Hydrogen Peroxide Spontaneously. <i>Journal of the American Chemical Society</i> , 2022, 144, 7606-7609.	6.6	69
104	Alignment of CN from 248 nm photolysis of ICN: A new model of the Àlf continuum dissociation dynamics. <i>Journal of Chemical Physics</i> , 1987, 87, 303-313.	1.2	67
105	Alignment and orientation of N ₂ scattered from Ag(111). <i>Journal of Chemical Physics</i> , 1987, 87, 3247-3249.	1.2	67
106	Molecular-orbital decomposition of the ionization continuum for a diatomic molecule by angle- and energy-resolved photoelectron spectroscopy. I. Formalism. <i>Journal of Chemical Physics</i> , 1996, 104, 4554-4567.	1.2	67
107	Electrically controlled release of insulin using polypyrrole nanoparticles. <i>Nanoscale</i> , 2017, 9, 143-149.	2.8	67
108	Comparison of reagent translation and vibration on the dynamics of the endothermic reaction Sr+HF. <i>Journal of Chemical Physics</i> , 1980, 72, 6250-6257.	1.2	66

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109	Effect of reagent translation on the dynamics of the exothermic reaction Ba+HF. Journal of Chemical Physics, 1980, 72, 6237-6249.	1.2	66
110	Multiphoton ionization photoelectron spectroscopy of phenol: Vibrational frequencies and harmonic force field for the 2B ₁ cation. Journal of Chemical Physics, 1985, 82, 5329-5339.	1.2	66
111	Measurement of circular dichroism in rotationally resolved photoelectron angular distributions following the photoionization of NO A ⁺ . Journal of Chemical Physics, 1992, 97, 4948-4957.	1.2	66
112	Measurement of relative state-to-state rate constants for the reaction D+H ₂ (v, j) → HD(v TM , j TM)+H. Journal of Chemical Physics, 1992, 97, 7323-7341.	1.2	66
113	The H+D ₂ reaction: Quantum state distributions at collision energies of 1.3 and 0.55 eV. Journal of Chemical Physics, 1989, 91, 7514-7529.	1.2	65
114	Nanoaggregates of Diverse Asphaltenes by Mass Spectrometry and Molecular Dynamics. Energy & Fuels, 2017, 31, 9140-9151.	2.5	63
115	Screening for genetic mutations. Nature, 1996, 380, 207-207.	13.7	62
116	Transient Ru-methyl formate intermediates generated with bifunctional transfer hydrogenation catalysts. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 2246-2250.	3.3	62
117	Effect of breaking cylindrical symmetry on photoelectron angular distributions resulting from resonance-enhanced two-photon ionization. Journal of Chemical Physics, 1991, 95, 1746-1756.	1.2	61
118	Site-selective bromination of sp ³ C-H bonds. Chemical Science, 2018, 9, 100-104.	3.7	61
119	Radiative Lifetime of the B ¹ u State of K ₂ . Journal of Chemical Physics, 1970, 53, 3094-3100.	1.2	60
120	Measurement of the state-specific differential cross section for the H+D ₂ → HD(v=4, j=3)+D reaction at a collision energy of 2.2 eV. Journal of Chemical Physics, 1995, 103, 5157-5160.	1.2	60
121	Comparing Laser Desorption/Laser Ionization Mass Spectra of Asphaltenes and Model Compounds. Energy & Fuels, 2010, 24, 3589-3594.	2.5	60
122	Internal state distributions of H ₂ desorbed from mono- and dihydride species on Si(100). Journal of Chemical Physics, 1992, 97, 3704-3709.	1.2	59
123	Differential cross section polarization moments: Location of the D-atom transfer in the transition-state region for the reactions Cl+C ₂ D ₆ → DCl(v=0, j=1)+C ₂ D ₅ and Cl+CD ₄ → DCl(v=0, j=1)+CD ₃ . Journal of Chemical Physics, 1997, 107, 9392-9405.		59
124	My Life with LIF: A Personal Account of Developing Laser-Induced Fluorescence. Annual Review of Analytical Chemistry, 2012, 5, 1-14.	2.8	59
125	Fall, recovery, and characterization of the Novato L6 chondrite breccia. Meteoritics and Planetary Science, 2014, 49, 1388-1425.	0.7	59
126	Polarized photofluorescence excitation spectroscopy. Molecular Physics, 1979, 38, 2049-2055.	0.8	58

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127	“Droplet” Chemistry: The Cycloaddition of Diethyl Azodicarboxylate and Quadricyclane. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 15083-15087.	7.2	58
128	Vibrationally state-selected reactions of ammonia ions. I. $\text{NH}_3^+(\nu)+\text{D}_2$. <i>Journal of Chemical Physics</i> , 1986, 84, 5527-5535.	1.2	57
129	2+1 resonantly enhanced multiphoton ionization of CO via the $E^1\sigma_g^+$ transition: From measured ion signals to quantitative population distributions. <i>Journal of Chemical Physics</i> , 1990, 93, 8557-8564.	1.2	57
130	Modes of Activation of Organometallic Iridium Complexes for Catalytic Water and C-H Oxidation. <i>Inorganic Chemistry</i> , 2014, 53, 423-433.	1.9	57
131	$\text{D}+\text{H}_2(\nu=1, J=1)$: Rovibronic state to rovibronic state reaction dynamics. <i>Journal of Chemical Physics</i> , 1990, 92, 2107-2109.	1.2	56
132	Two-color resonant four-wave mixing: Analytical expressions for signal intensity. <i>Journal of Chemical Physics</i> , 1997, 106, 3090-3102.	1.2	56
133	Droplet Spray Ionization from a Glass Microscope Slide: Real-Time Monitoring of Ethylene Polymerization. <i>Analytical Chemistry</i> , 2015, 87, 8057-8062.	3.2	56
134	Assessment and control of organic and other contaminants associated with the Stardust sample return from comet 81P/Wild 2. <i>Meteoritics and Planetary Science</i> , 2010, 45, 406-433.	0.7	55
135	Preparative microdroplet synthesis of carboxylic acids from aerobic oxidation of aldehydes. <i>Chemical Science</i> , 2018, 9, 5207-5211.	3.7	55
136	Channel-specific angular distributions of HCl and CH_3 products from the reaction of atomic chlorine with stretch-excited methane. <i>Journal of Chemical Physics</i> , 2002, 117, 3232-3242.	1.2	54
137	High-precision optical measurements of $^{13}\text{C}/^{12}\text{C}$ isotope ratios in organic compounds at natural abundance. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2009, 106, 10928-10932.	3.3	54
138	The $\text{H}+\text{para-H}_2$ reaction: Influence of dynamical resonances on H_2 ($\nu^{\text{TM}}=1, j^{\text{TM}}=1$ and 3) integral cross sections. <i>Journal of Chemical Physics</i> , 1991, 94, 1069-1080.	1.2	53
139	Injection of Ultrasmall Samples and Single Molecules into Tapered Capillaries. <i>Analytical Chemistry</i> , 1997, 69, 1801-1807.	3.2	53
140	Minimization of Fragmentation and Aggregation by Laser Desorption Laser Ionization Mass Spectrometry. <i>Journal of the American Society for Mass Spectrometry</i> , 2013, 24, 1116-1122.	1.2	53
141	Sprayed water microdroplets containing dissolved pyridine spontaneously generate pyridyl anions. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2022, 119, e2200911119.	3.3	53
142	Primitive angular distribution studies of internal states in crossed-beam reactions using laser fluorescence detection. <i>Journal of Chemical Physics</i> , 1974, 61, 2464-2465.	1.2	51
143	Application of ion imaging to the atom-molecule exchange reaction: $\text{H}+\text{HI}^+\text{H}_2+\text{I}$. <i>Journal of Chemical Physics</i> , 1991, 94, 4672-4675.	1.2	51
144	Electroresponsive nanoparticles for drug delivery on demand. <i>Nanoscale</i> , 2016, 8, 9310-9317.	2.8	51

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145	Determination of population, alignment, and orientation using laser induced fluorescence with unresolved emission. <i>Journal of Chemical Physics</i> , 1988, 88, 7357-7368.	1.2	50
146	Chemoselective N-alkylation of Indoles in Aqueous Microdroplets. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 3069-3072.	7.2	50
147	Highly parallel and efficient single cell mRNA sequencing with paired picoliter chambers. <i>Nature Communications</i> , 2020, 11, 2118.	5.8	50
148	Population and alignment of N ₂ scattered from Ag(111). <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 1987, 5, 513-517.	0.9	49
149	Strategy for On-Line Preconcentration in Chromatographic Separations. <i>Analytical Chemistry</i> , 2001, 73, 5539-5543.	3.2	49
150	Catalytic Role of Multinuclear Palladium-Oxygen Intermediates in Aerobic Oxidation Followed by Hydrogen Peroxide Disproportionation. <i>Journal of the American Chemical Society</i> , 2015, 137, 13632-13646.	6.6	49
151	Mechanism of Catalytic Oxidation of Styrenes with Hydrogen Peroxide in the Presence of Cationic Palladium(II) Complexes. <i>Journal of the American Chemical Society</i> , 2017, 139, 12495-12503.	6.6	49
152	Comparison of the Ca+HF(DF) and Sr+HF(DF) reaction dynamics. <i>Journal of Chemical Physics</i> , 1988, 89, 6283-6294.	1.2	47
153	Speed-Dependent Photofragment Orientation in the Photodissociation of OCS at 223 nm. <i>Journal of Physical Chemistry A</i> , 1999, 103, 10144-10148.	1.1	47
154	Teaching Effective Communication in a Writing-Intensive Analytical Chemistry Course. <i>Journal of Chemical Education</i> , 2003, 80, 904.	1.1	47
155	A Study of Heterogeneous Catalysis by Nanoparticle-Embedded Paper-Spray Ionization Mass Spectrometry. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 12807-12811.	7.2	47
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